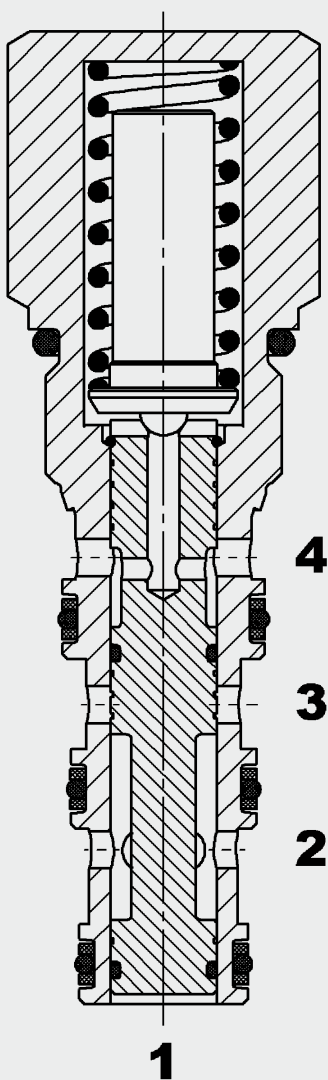


## FUNCTION



The WKH10W is a hydraulically-operated, 2/2 directional valve. Ports 3 and 2 are closed in the normal position. When there is an increase in pressure at port 1 against the spring force, the valve opens between port 3 and port 2. Oil can flow through the valve in both directions. Any pressure at port 4 is additive to the spring value.

## 2/2 Directional Spool Valve Hydraulically Operated, Direct-Acting Normally Closed SAE-10 Cartridge – 350 bar

**UNF**

WKH10W/14

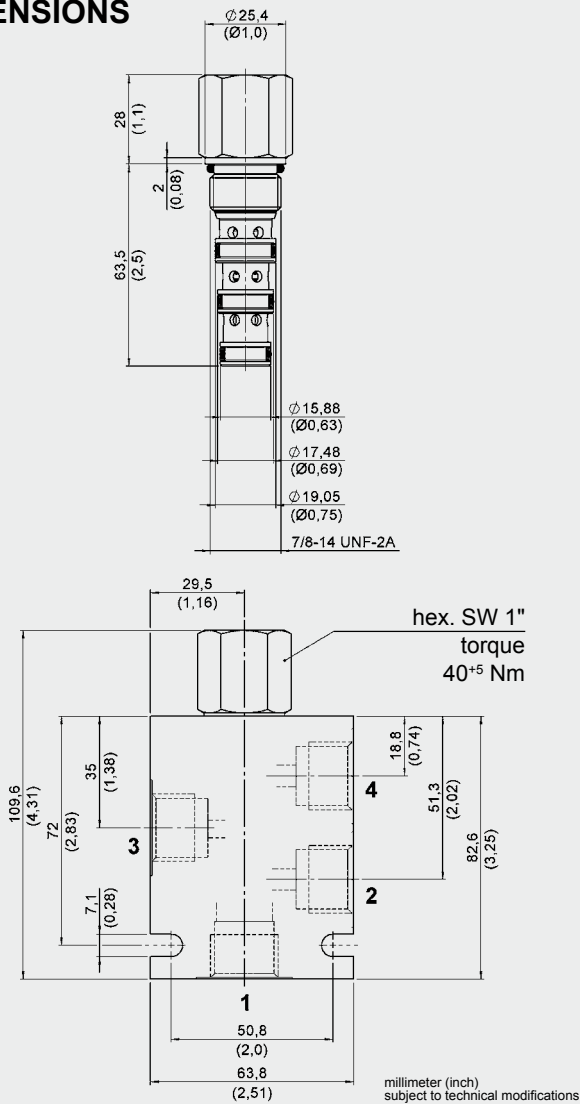
## FEATURES

- Low pressure drop throughout flow range
- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life

## SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 40 l/min
Internal leakage:	max. 200 cm <sup>3</sup> /min at 350 bar and 36 mm <sup>2</sup> /s
Media operating temperature range:	-30 °C to +100 °C
Ambient temperature range:	min. -30 °C to +80 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity range:	min. 7.4 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF <sub>d</sub> :	150 years (see "Conditions and instructions for valves" in brochure 5.300)
Installation:	No orientation restrictions
Materials:	Valve body: steel Spool: hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C) Back-up ring: PTFE
Cavity:	FC10-4
Weight:	approx. 0.192 kg

## DIMENSIONS



## MODEL CODE

**WKH 10 W / 14 - 01 - C - NS - 070**

### Basic model

Directional valve,  
hydraulically operated

### Cavity

W = normally closed

### Internal pressure pilot

14 = port 1 and port 4

### Type

01 = standard

### Body and ports\*

C = cartridge only

Versions with bodies on request\*

### Seals

N = NBR (standard)

NS = NBR standard with additional O-ring on control spool

V = FKM (optional)

VS = FKM standard with additional O-ring on control spool

### Switch pressure

70 = 4.8 bar ( 70 PSI)

90 = 6.2 bar ( 90 PSI)

30 = 9 bar (130 PSI)

180 = 12.4 bar (180 PSI)

Higher switch pressures on version with O-ring on control spool!

## Standard models

Model code	Part No.
WKH10W/14-01-C-N-070	3633171
WKH10W/14-01-C-N-090	3633172
WKH10W/14-01-C-N-130	3633173
WKH10W/14-01-C-N-180	3633174

Other models on request

## \*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH104-SB4	3037784	Steel, zinc-plated	1/2 BSP	420 bar
FH104-AB4	3038097	Aluminium, anodized	1/2 BSP	210 bar

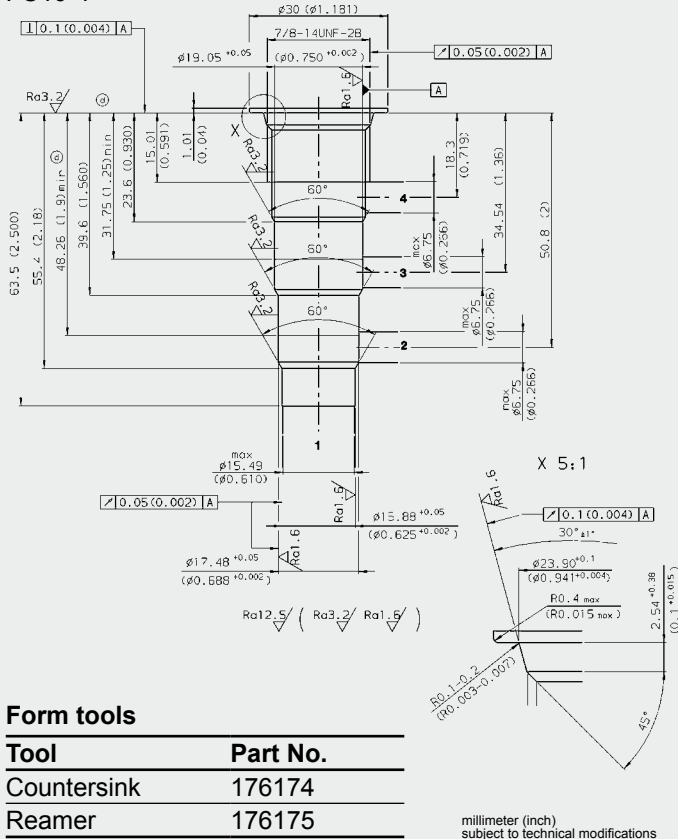
Other line bodies on request

## Seal kits

Code	Material	Part No.
FS104-N SEAL KIT	NBR	3051912
FS104-V SEAL KIT	FKM	3071275

## CAVITY

### FC10-4



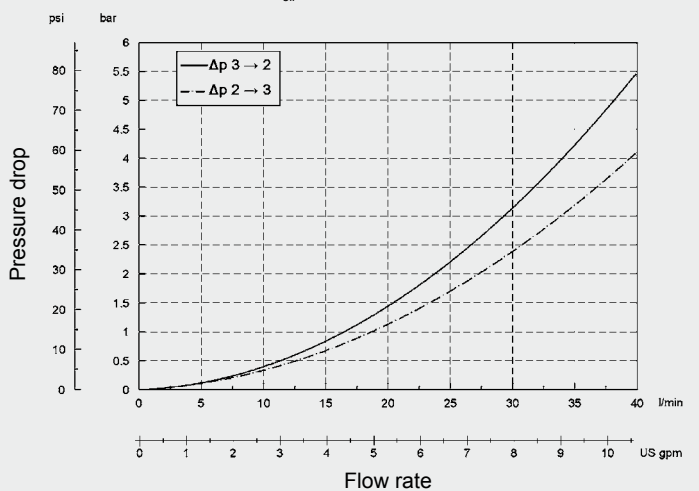
## Form tools

Tool	Part No.
Countersink	176174
Reamer	176175

millimeter (inch)  
subject to technical modifications

## PERFORMANCE

Measured at  $v = 33 \text{ mm}^2/\text{s}$ ,  $T_{oil} = 46 \text{ }^\circ\text{C}$



## NOTE

The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.  
Subject to technical modifications.

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